

### **REMARKS**

The Applicant thanks the Examiner for the thorough examination of the application. No new matter is believed to be added to the application by this Reply.

### **Status Of The Application**

The Examiner has entered the Reply filed January 12, 2005, as was indicated at page 2 of the Advisory Action mailed February 9, 2005.

### **Entry of Reply**

Entry of this Reply under 37 C.F.R. 1.116 is respectfully requested because it places the application in condition for allowance. Alternately, entry is requested because it places the application in better form for appeal.

### **Status of the Claims**

Claims 1-21 are pending in the application. Claim 21 is withdrawn from consideration. Claims 1-20 are rejected.

### **Claim Objections**

The Examiner objects to claim 2 as being unclear. However, claim 2 is clear, as has been fully explained at pages 2-3 of the Reply filed January 12, 2005. Additional remarks are accordingly not necessary.

### **Rejections Based Upon The Applicant's Disclosure**

Claims 1, 2, 7, 8 and 11 remain rejected under 35 U.S.C. §103(a) as being obvious over Rho (U.S. Patent 6,057,896) in view of the Applicant's disclosure. The Examiner adds the teachings of Shimada (U.S. Patent 6,424,399) to the aforesaid rejection to reject claims 3, 4, 9 and 13-15. The Examiner adds the teachings of Jeong (U.S. Patent 6,137,551) to Rho and the Applicant's disclosure to reject claims 5, 10, 16 and 17. The Examiner adds the teachings of Shimada '325 (JP-03-141325) to Rho and the Applicant's disclosure to reject claims 6 and 18. The Examiner rejects claims 12, 19 and 20 over Rho in view of the Applicant's disclosure. Applicant respectfully maintains traversal of all of the aforesaid rejections.

The inability of the Examiner to utilize the Applicant's own disclosure as prior art has been fully explained at pages 3-7 of the Reply filed January 12, 2005. For brevity, this discussion is not repeated here.

However, the Applicant emphasizes that the utilization of the Applicant's disclosure without an admission of prior art is improper when the Applicant's disclosure represents the Applicants' own work. Riverwood International Corporation v. R.A. Jones & Co., Inc., 324 F.3d 1346, 66 U.S.P.Q.2d 1331 (C.A.F.C. 2003).

There is an important distinction between the situation where the inventor improves upon his own invention and the situation where he improves upon the invention of another. In the former situation, where the inventor continues to improve upon his own work product, his foundational work product should not, without a statutory basis, be treated as prior art solely because he admits knowledge of his own work. It is common sense that an inventor, regardless of an admission has knowledge of his own work . . . One's own work may not be considered prior art in the absence of a statutory basis and a patentee should not be "punished" for being as inclusive as possible and referencing his own work . . . 324 F.3d at 1355.

At page 2 of the Advisory Action mailed February 9, 2005, the Examiner is not persuaded:

It is respectfully noted the Applicant's arguments are not found to be persuasive. The Examiner respectfully notes that Applicant's Figures 5 and 6D are clearly referred to as conventional art. The Examiner has carefully reviewed Applicant's Specification and finds no clear indication that said conventional art is Applicant's own work. In fact, Applicant's Specification states that "Generally, a liquid crystal display (LCD) controls the light transmittance of liquid crystal cells in response to a video signal to thereby display a picture." (Specification at page 1). This "generally" refers to all of the conventional art. "Generally" means that this is the work of others. At least with reference to Figure 6D, Applicant states "[s]uch a liquid crystal display . . ." (Specification at page 7) which

means, suggest and implies that his is the work of others. MPEP 2129 states that "[i]n the absence of another credible explanation, examiners should treat such subject matter as the work of another." Thus, Applicant's figures are the work of others and are appropriately "prior art."

However, the conventional art discussed in the specification is not general art, but is based on the mass-produced product currently being produced by the production line of the Applicant, LG. Philips LCD Co. If the Examiner desires, a Declaration under 37 C.F.R. §1.132 can be provided to verify the status of the conventional art discussed in the specification.

Also, the invention has technical advantages that are neither disclosed nor suggested by the applied art. A typical embodiment of the invention is found in instant claim 1:

1. A liquid crystal display, comprising:
  - a gate electrode over a substrate;
  - a gate insulating film entirely deposited over the substrate to cover said gate electrode;
  - an active layer formed on said gate insulating film which overlaps with said gate electrode;
  - an ohmic contact layer formed on said active layer;
  - a source electrode formed on said ohmic contact layer;
  - a drain electrode formed on said ohmic contact layer, the drain electrode being opposed to said source electrode to form a channel;
  - a storage electrode formed at a pixel cell area of a same layer as said gate electrode; and
  - a pixel electrode formed to oppose to said storage electrode having said gate insulating film in between said pixel electrode and said storage electrode, and said pixel electrode being electrically connected with said drain electrode; and
  - a protective layer covering said source electrode, said drain electrode and some portions of the pixel electrode.

The protective layer, i.e., passivation layer, described in the last subparagraph of claim 1 can be formed from an organic material such as is described at paragraphs 0068 and 0089 of the specification: an acrylic organic compound, TEFLON (polytetrafluoroethylene), benzocyclobutene (BCB), CYTOP (perfluoropolymer resin), perfluorocyclobutane (PFCB), etc. See also claims 11, 19 and 20.

In contrast, the related art protective layer described at paragraphs 0014 and 0024 of the specification is an inorganic protective layer formed from silicon nitride or silicon oxide. However, as discussed in paragraph 0025 of the specification, this related art technology deleteriously reduces the aperture ratio as the capacitance is increased to overcome flicker.

That is, the structure in which the pixel electrode is directly used as a storage electrode is more effective in the present invention by using the organic material as the protective (passivation) layer, rather than the inorganic materials used in the related art. As discussed at paragraph 0067 of the specification, spin coating the organic insulating material of the protective layer can be used to achieve a flattened surface. The result is a display that achieves enhanced capacitance without reducing the aperture ratio.

Therefore, the invention yields a truly superior result that would fully rebut any *prima facie* case of obviousness that could be alleged, based upon the

disclosure in the specification, if one assumes *arguendo* that the Applicant's disclosure could be utilized.

These rejections are accordingly overcome and withdrawal thereof is respectfully requested.

### **Drawings**

The Examiner has found the drawing figures to be acceptable in the Office Action mailed October 12, 2004.

### **Foreign Priority**

The Examiner has acknowledged foreign priority in the Office Action mailed October 12, 2004.

**CONCLUSION**

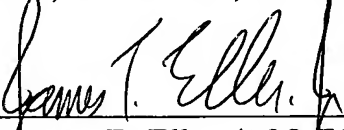
The Examiner's objections and rejections have been overcome, rendered moot or obviated. No issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner, Ph.D. (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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